

ABSTRACT OF THE DISCLOSURE

One or more embodiments of the present invention provide a method and apparatus for multicasting of data, for example, cell data or frame data, with the ability to dynamically manage such multicasting. A data structure, referred to as a to-do list, is maintained with entries for enqueued data elements. To-do list entries include a data element pointer identifying the corresponding data element and a leaf to be processed pointer indicating the progression of transmission of the corresponding data element to the plurality of leaves of a multicast tree, wherein the plurality of leaves are used to transmit the data to a plurality of multicast destinations. A method for counting copies of each data element as they are transmitted to each of the plurality of leaves is performed so as to accommodate the addition or deletion of one or more multicast leaves during the multicasting process.